

IN THE CLAIMS

Claims 1-34 were previously cancelled. Claim 35 is currently amended. Claims 36-45 were previously cancelled. Claims 46-48 were previously presented. Claims 49 and 50 were previously cancelled. Claims 51, and 52 were previously presented. Claim 53 is currently amended. Claim 54 is currently cancelled. Claims 55-70 were previously cancelled. Claim 71 is currently cancelled.

Claims 1-35 (Cancelled)

35. (Currently Amended) A device for drawing in at least one paper web in a web-fed rotary printing press, said device comprising:

a paper web draw-in, said paper web draw-in having a length said length including a first, spike bearing portion and a second, spike-free portion;

a plurality of spikes spaced apart from each other at a first distance and permanently attached to only said first, spike bearing portion of said paper web draw-in [along a portion of said length], said plurality of spikes being adapted to selectively penetrate through a paper web only during paper web draw-in along a paper web path in a web-fed rotary printing press, said paper web path being substantially greater in length than said first distance; and

means moving said ~~portion of said~~ paper web draw-in for causing said spikes on said first, spike bearing portion of said length of said paper web draw-in to

penetrate a paper web only during said drawing in of a paper web into a web-fed rotary printing press along said paper [[a]] web path and for moving said first, spike bearing portion of said paper web draw-in to a storage path for removing said spikes from penetration of a paper web upon completion of said drawing in of a paper web along said paper [[a]] web path, said second, spike-free portion of said paper web draw-in then being in contact with said paper web along said paper web path upon completion of said drawing in of a paper web along said paper web path.

Claims 36-45 (Cancelled)

46. (Previously Presented) The device of claim 35 wherein said paper draw-in is a belt.

47. (Previously Presented) The device of claim 46 wherein said belt is metallic.

48. (Previously Presented) The device of claim 46 wherein said belt is non-metallic.

Claims 49-50 (Cancelled)

51. (Previously Presented) The device of claim 35 wherein said draw-in has a finite length.

52. (Previously Presented) The device of claim 35 further including paper web retention devices on said spikes.

53. (Currently Amended) A device for drawing in at least one paper web in a web-fed rotary printing press, said device comprising:

- a paper web draw-in;

- a plurality of spikes permanently attached to said paper web draw-in, said spikes being adapted to penetrate through a paper web during drawing in of a paper web along a web transport path in a web-fed rotary printing press;

- a paper web retention device on each of said plurality of spikes, each said retention device being a barb; and

- means causing said spikes to penetrate a paper web only during said drawing in of a paper web into a web-fed rotary printing press along a web transport path and for removing said spikes from penetration of a paper web upon completion of said drawing in of a paper web along a web transport path.

Claims 54-71 (Cancelled)

REMARKS

The courtesies extended to the undersigned by the Examiner, John Nguyen, during the interview held April 19, 2004 are acknowledged and appreciated. As discussed during the interview, the Office Action of January 23, 2004 has been carefully reviewed and claim 35, the sole independent claim is again being amended. It is believed that all of the claims now pending in the application are patentable over the prior art cited and relied on by the Examiner. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

As discussed with the Examiner during the interview, the subject application discloses, and claims a paper web draw-in that is usable for drawing in at least one paper web in a web-fed rotary printing press. Such a draw-in device is usable only during the drawing-in of the at least one paper web, and is not used during normal operations of the web-fed rotary printing press. The purpose of the draw-in device is to thread or to lead the beginning portion of a paper web, or of a group of paper webs, through the complex path that the paper web travels through the web-fed rotary printing press. Typically, there are a number of draw-in devices placed serially along the path of web travel. This is for two reasons. The first is that one draw-in device, extending the entire length of the path of web travel, would be a very complex assembly. The second is that a web-fed rotary printing press typically has several different travel paths, depending on the type of printing being done. Each of these paths requires its own draw-in devices. The web-fed rotary printing press is thus divided into segments or

sections, each of which has its own draw-in device.

In the subject invention, as depicted in Figs. 1, 2 and 13, a paper web, a group of webs 05, 06, 07, 12 or a train of webs 08, 140 is fed to a train or web pre-entry device 111. The pre-entry device 111 ends before a hopper insertion roller 16. A longitudinal folding hopper 18 is located after, in the path of web travel, the web pre-entry device 11. The folding hopper 18 is followed by a pair of hopper folding rollers 26 and 27.

A web draw-in 33 and 34, as seen in Figs. 1 and 2, or 124, as seen in Fig. 13, is used to draw in the paper web or web trains from the hopper insertion roller 16 to the hopper folding rollers 26 and 27. As seen in Figs. 1 and 2, and as discussed in the Second Substitute Specification, at paragraph 075, the web draw-in or traction means 33, 34, 124 has a plurality of spikes 35 that are used to engage the paper web during the draw-in of the paper web along the paper web path from the hopper insertion roller 16 to the hopper folding rollers 26 and 27. A large portion of the traction means or the draw-in is provided without spikes. This portion of the draw-in, without the spikes, is placed on the hopper plate 21 and the hopper flanks 22 and 23 and the hopper plates 55 and 65 once the paper web has reached the driven hopper folding rollers 26 and 27; i.e. once draw in of the paper web has been accomplished. The spike-bearing portion of the draw-in is stored behind the hopper plate 21, the hopper flanks 22, 23 and the hopper plates 55 and 65. The spike free portion of the draw in does not impede the movement of the paper web through the longitudinal folding hopper 18.

In the Office Action of January 20, 2004 claim 54 was withdrawn from consideration as being drawn to a non-elected species. That claim has now been cancelled. Applicants reserve the right to file a divisional application directed to this nonelected species.

Claim 53 was rejected under 35 U.S.C. 112, second paragraph as being indefinite. The typographical error noted by the Examiner at line 10 of claim 53 has been corrected. It is believed that claim 53 is now in condition for allowance.

Claims 35, 51, 52 and 71 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent No. 4,619,449 to Fischer. Claims 35, 46-48, 51, 52 and 71 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent No. 3,367,549 to Assony.

As discussed with Examiner Nguyen during the interview held April 19, 2004, claim 35 has been amended to more clearly recite that there are a plurality of spikes spaced apart from each other at a first distance and located on a first, spike bearing portion of the length of the paper web draw-in. Claim 35 has also been amended to recite that the paper web path is substantially greater than the distance between the spikes on the spike bearing portion. Claim 35 has also been further amended to recite that the spike-free portion of the paper web draw-in is in contact with the paper web along the paper web path upon completion of the drawing in of the paper web.

Neither of the prior art Fischer and Assony references is believed to anticipate, or render obvious the device for drawing in a paper web as recited in currently

amended claim 35. Neither of the Fischer or Assony devices is directed to a paper web draw-in device. Neither has a draw-in with a spike bearing portion and a spike-free portion, with the spike-free portion being in contact with the paper web along the paper web path, which is substantially greater than the distance between the spikes, in the spike bearing portion, when the drawing-in of the paper web is completed.

In the Fischer patent, No. 4,619,449, there is shown a folding apparatus. A roller 2 is provided with a plurality of pins extending in a line about its entire circumference. These pins are always in engagement with a web, as that web is directed to a folding former. There is no showing, or suggestion, in Fischer of a paper web draw-in that has a length and that has a plurality of spikes attached to only a portion of that length. There is also no teaching or suggestion in Fischer of means for moving that spike-bearing portion of the draw-in and thus causing the spikes to engage the web only during draw-in of the web and for moving that spike bearing portion of the draw-in to a storage path for removing the spikes from penetration of the web upon completion of drawing in of the web along the web path. Fischer clearly teaches that the pins 6 are placed in a complete ring about the supply roller 2. There is no position in which that supply roller can be placed, in which a portion of the draw-in, with the spike bearing portion, is moved so that it does not engage the paper web upon completion of a web draw-in. The Fischer device is used to prevent buckling of the lowermost one or of a group of webs that are being directed to the longitudinal folder. The supply roller 2 cooperates with a hold-down roller 9 to forward the paper web to the longitudinal folding

hopper. The supply roller 2 does not extend along the paper web draw in path to any length. It is tangent to the path only at the point or the short line segment where the paper is in contact with the periphery of the roller.

The Assony patent is also not directed to a draw-in device which is usable only during the drawing in of a paper web along a web path. In Assony there is shown either a wheel 31 with a spiked periphery, or a belt 15 with a spiked periphery. In the Assony device, these spikes or pins 21 are always in engagement with the web, which is provided with a longitudinal row of holes 20. The belt 15 is provided with pins 21 along its entire length, as is clearly shown in Fig. 1. There is no time when the belt 15 is moved to a storage position in which the pins 21 are removed from penetration of the web. In Assony, the pins 21 are the traction means which pulls the collated sheets of paper 16 and interleaved carbon sheets 17 along a top surface of a table T. At all times, a plurality of the pins 21 carried by the belt are in contact with the holes 20 in the collated stack of papers 16 and carbon sheets 17. As was the case with the Fischer reference, the Assony device is not a web draw-in. It is not intended to be used for drawing a web into a web-fed rotary printing press and for separating from the web upon completion of the draw-in.

It is noted that the Office Action asserted that the features upon which the applicant relied in the Amendment After Final Rejection; i.e. a plurality of spikes attached to only a portion of the length, was not present in the rejected claims. It is respectfully noted that claim 35 as amended by the Amendment After Final Rejection,

filed November 12, 2003 and not entered in the case until the filing of the Request For Continued Examination on December 12, 2003, did contain that language.

Claim 35, as currently amended, is believed to not be anticipated by, or rendered obvious to one of skill in the art over either Fischer or Assony, taken singly or in combination. As discussed above, and as discussed with the Examiner, neither of these two references or their combination shows, or suggests the device for drawing in a web, as recited in currently amended claim 35.

Claims 46, 47, 48, 51, and 52 which all depend from believed allowable, currently amended claim 35, are also all believed to now be allowable. Indicated allowable claim 53 has been amended to overcome the rejection under 35 U.S.C. 112, second paragraph. Claim 53 is thus also believed to now be in condition for allowance.

The additional art of record, which was not relied on by the Examiner in the rejections of the claims, has again been reviewed. Since it was not applied against the claims, no further discussion thereof is believed to be required.